

# SNAP MOUNT TYPE ALUMINUM ELECTROLYTIC CAPACITORS

**NEW!**

## PS2 Series

Useful of 4,000 hours at 85°C



- Conform RoHS



### Features

- Higher ripple though use of low-ESR material consequently, the permissible ripple current is improved by 27% in the windless status or 40% in the ventilated condition (0.5m/s) as compared with conventional constructions (HP3 series).
- Improvement in air exhaust (flow hole phenomenon) from the terminal insertion hole at solder fixing though improvement of cap construction.
- The operating space of the safety vent (arranged on the case bottom) is reduced from 5mm (conventional necessary distance) into 1mm through improvement of case construction. For these new case construction, pattern design can be move flexible.

### Product Specifications

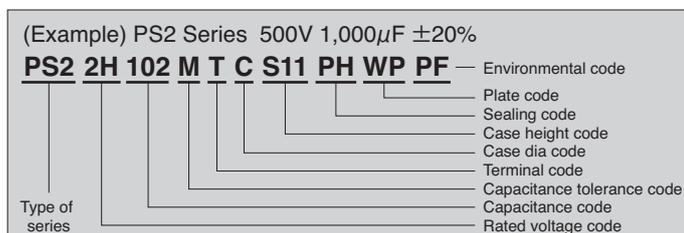
Items	Specifications
Temperature range	-40°C ~ +85°C (200 ~ 500V.DC) -25°C ~ +85°C (550, 600V.DC)
Rated voltage	200 ~ 600V.DC
Capacitance tolerance	±20% (20°C, 120Hz)
Leakage current	0.01CV (µA) or 5mA, whichever is smaller or less (20°C, after 5 minutes) [C = nominal capacitance (µF), V = rated voltage (V)]
Dissipation factor	Less than the value specified in the standard products table. (20°C, 120Hz)
Permissible ripple current	As specified in the standard product table. (85°C, 120Hz)
Endurance	After the rated voltage with specified ripple current is applied at 85°C for 2,000 hours : Capacitance change : Within ±15% of the initial value measured Dissipation factor : 175% or less than the initial value specified Leakage current : Less than or equal to the initial value specified
Shelf life	The following specification shall be meet when the capacitor are restored to 20°C after storage of 500 hours at 85°C with no voltage applied. Before the measurement, the capacitor shall be preconditioned by applying the voltage treatment according to Item 4.1 of JIS C 5101-4. Capacitance change : Within ±15% of the initial value measured Dissipation factor : 175% or less than the initial value specified Leakage current : Less than or equal to the initial value specified
Others	JIS C 5101-4

### Ripple current correction coefficient

Temperature (°C)		40	60	85		
Correction coefficient	200~500V.DC	1.89	1.51	1.00		
	550~600V.DC	1.65	1.45	1.00		
Frequency (Hz)		50/60	120	300	1K	≥10K
Correction coefficient		0.7	1.0	1.1	1.3	1.4
Forced wind (m/s)		<0.5	0.5 ≤			
Correction coefficient		1.0	1.1			

Terminal permissible current is limited to 15Arms (φ41, 46), 20Arms (φ51).  
(Even if calculated the permissible ripple current with the correction coefficient exceeds 15, 20 Arms)  
Please consult us when the ripple voltage exceeds 70Vp-p.

### Product code

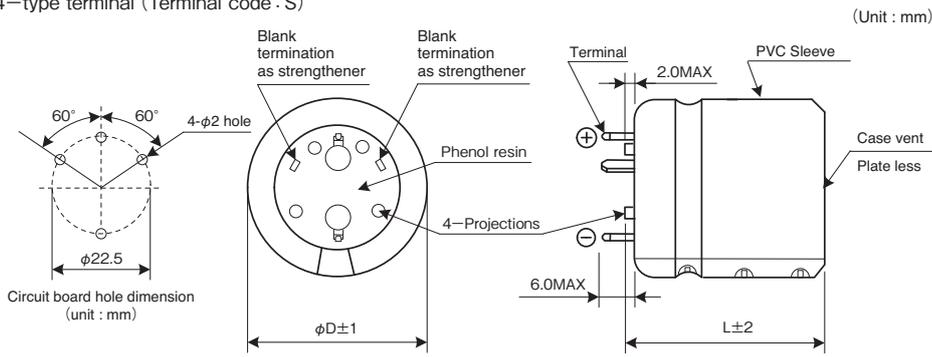


ALUMINUM ELECTROLYTIC CAPACITORS

### Dimensions

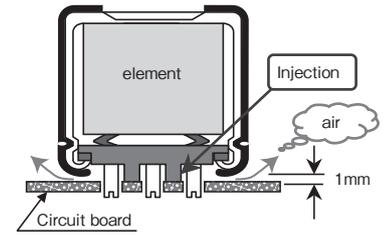
●  $\phi 41, 46$

4-type terminal (Terminal code : S)

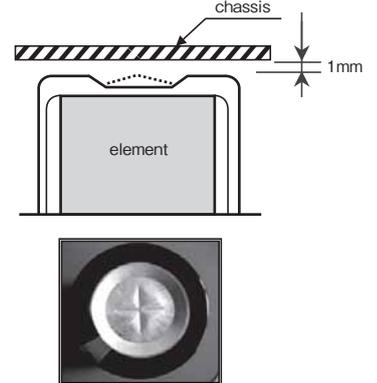


### Special structure

① Improvement of flow hole

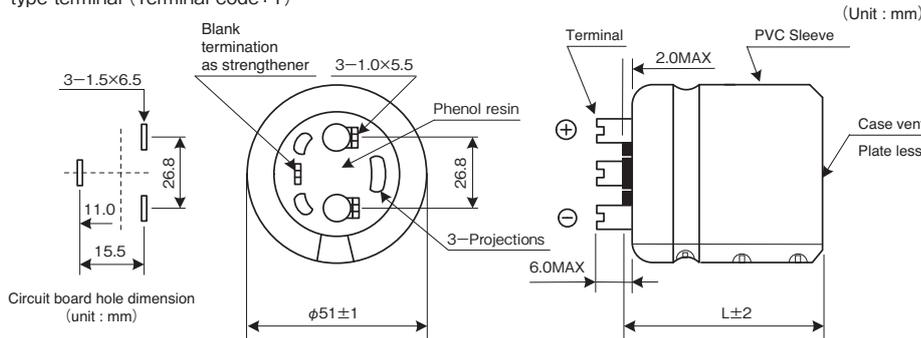


② Improved valve working distance



●  $\phi 51$

T-type terminal (Terminal code : T)



### Standard Products Table

Rated Voltage (V. DC)	Capacitance ( $\mu$ F)	Case size $\phi D \times L$ (mm)	$\tan \delta$ 20°C, 120Hz	Ripple current (Arms) 85°C, 120Hz	ESR (typ.) (m $\Omega$ ) 20°C, 100Hz	Product name
200	1,800	41×45	0.15	5.78	63	PS22D182MSBS6PHWPPF
	2,200	41×55	0.15	6.35	52	PS22D222MSBS8PHWPPF
	2,700	46×51	0.15	6.58	42	PS22D272MSHS7PHWPPF
		41×64	0.15	7.46	34	PS22D332MSBS10PHWPPF
		46×61	0.15	7.35	34	PS22D332MSHS9PHWPPF
	3,900	51×51	0.15	7.07	35	PS22D332MTC9PHWPPF
		46×70	0.15	7.98	30	PS22D392MSBS10PHWPPF
4,700	51×61	0.15	7.76	30	PS22D392MTC9PHWPPF	
250	1,200	41×45	0.15	4.72	95	PS22E122MSBS6PHWPPF
	1,800	41×55	0.15	5.75	63	PS22E182MSBS8PHWPPF
		46×51	0.15	5.37	63	PS22E182MSHS7PHWPPF
	2,200	41×64	0.15	6.41	52	PS22E222MSBS10PHWPPF
		46×61	0.15	6.00	52	PS22E222MSHS9PHWPPF
	2,700	51×51	0.15	6.40	43	PS22E272MTC9PHWPPF
		46×70	0.15	7.34	34	PS22E332MSHS11PHWPPF
400	3,300	51×61	0.15	7.14	34	PS22E332MTC9PHWPPF
		51×70	0.15	7.73	30	PS22E392MTC9PHWPPF
	560	41×45	0.15	4.22	132	PS22G561MSBS6PHWPPF
	680	41×55	0.15	4.62	109	PS22G681MSBS8PHWPPF
	820	46×51	0.15	5.13	90	PS22G821MSHS7PHWPPF
		41×64	0.15	5.66	80	PS22G102MSBS10PHWPPF
		46×61	0.15	5.73	80	PS22G102MSHS9PHWPPF
1,000	51×51	0.15	5.88	80	PS22G102MTC9PHWPPF	
	46×70	0.15	6.26	66	PS22G122MSHS11PHWPPF	
1,200	51×61	0.15	6.51	66	PS22G122MTC9PHWPPF	
	51×70	0.15	7.25	53	PS22G152MTC9PHWPPF	
420	470	41×45	0.15	3.71	158	PS2420V471MSBS6PHWPPF
		41×55	0.15	4.44	109	PS2420V681MSBS8PHWPPF
	680	46×51	0.15	4.48	109	PS2420V681MSHS7PHWPPF
		41×64	0.15	4.92	90	PS2420V821MSBS10PHWPPF
	820	51×51	0.15	5.11	90	PS2420V821MTC9PHWPPF
		46×61	0.15	5.49	80	PS2420V102MSHS9PHWPPF
	1,200	46×70	0.15	6.01	66	PS2420V122MSHS11PHWPPF
51×61		0.15	6.25	66	PS2420V122MTC9PHWPPF	
1,500	51×70	0.15	6.96	53	PS2420V152MTC9PHWPPF	

Rated Voltage (V. DC)	Capacitance ( $\mu$ F)	Case size $\phi D \times L$ (mm)	$\tan \delta$ 20°C, 120Hz	Ripple current (Arms) 85°C, 120Hz	ESR (typ.) (m $\Omega$ ) 20°C, 100Hz	Product name
450	390	41×45	0.15	3.38	190	PS22W391MSBS6PHWPPF
	560	41×55	0.15	4.03	132	PS22W561MSBS8PHWPPF
	680	46×51	0.15	4.48	109	PS22W681MSHS7PHWPPF
		41×64	0.15	4.92	90	PS22W821MSBS10PHWPPF
		46×61	0.15	4.98	90	PS22W821MSHS9PHWPPF
	820	51×51	0.15	5.11	90	PS22W821MTC9PHWPPF
		46×70	0.15	5.48	80	PS22W102MSBS10PHWPPF
1,000	51×61	0.15	5.70	80	PS22W102MTC9PHWPPF	
1,200	51×70	0.15	6.22	66	PS22W122MTC9PHWPPF	
500	330	41×45	0.20	2.96	290	PS22H331MSBS6PHWPPF
	470	41×55	0.20	3.51	210	PS22H471MSBS8PHWPPF
		46×51	0.20	3.54	210	PS22H471MSHS7PHWPPF
	560	41×64	0.20	3.87	180	PS22H561MSBS10PHWPPF
	680	46×61	0.20	4.31	150	PS22H681MSHS9PHWPPF
		51×51	0.20	4.43	150	PS22H681MTC9PHWPPF
	820	46×70	0.20	4.72	120	PS22H821MSHS11PHWPPF
51×61		0.20	4.91	120	PS22H821MTC9PHWPPF	
1,000	51×70	0.20	5.40	100	PS22H102MTC9PHWPPF	
550	220	41×45	0.20	2.33	510	PS22L221MSBS6PHWPPF
	270	41×55	0.20	2.57	420	PS22L271MSBS8PHWPPF
	330	46×51	0.20	2.87	340	PS22L331MSHS7PHWPPF
		41×64	0.20	3.12	290	PS22L391MSBS10PHWPPF
	390	46×61	0.20	3.15	290	PS22L391MSHS9PHWPPF
		51×51	0.20	3.24	290	PS22L391MTC9PHWPPF
	560	46×70	0.20	3.77	200	PS22L561MSHS11PHWPPF
51×61		0.20	3.92	200	PS22L561MTC9PHWPPF	
680	51×70	0.20	4.31	170	PS22L681MTC9PHWPPF	
600	180	41×45	0.20	2.11	620	PS2600V181MSBS6PHWPPF
	220	41×55	0.20	2.32	510	PS2600V221MSBS8PHWPPF
	270	46×51	0.20	2.59	420	PS2600V271MSHS7PHWPPF
	330	41×64	0.20	2.87	340	PS2600V331MSBS10PHWPPF
		46×61	0.20	3.15	290	PS2600V391MSHS9PHWPPF
	390	51×51	0.20	3.24	290	PS2600V391MTC9PHWPPF
		46×70	0.20	3.45	240	PS2600V471MSHS11PHWPPF
470	51×61	0.20	3.59	240	PS2600V471MTC9PHWPPF	
	51×70	0.20	3.91	200	PS2600V561MTC9PHWPPF	

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## Life time graph

Useful life depending on ambient temperature  $T_a$  and ripple current operating condition  $I$  versus rated ripple current at 85°C, 120Hz.

